

WHAT IS CLAIMED IS:

1. A scanner comprising:

an optical reading unit which optically scans a surface of an original and converts an image on the 5 surface of the original into image data;

a radio communication unit which, at the time of scanning the original in which an IC chip having a radio communication function has been embedded, by the optical reading unit, carries out radio communication 10 with the IC chip; and

a control unit which optically scans the surface of the original by the optical reading unit and converts the image on the surface of the original into image data when scanning of the original in which the 15 IC chip having a radio communication function has been embedded is requested, and reads electric data recorded in a memory in the IC chip built in the original, by the radio communication unit.

2. The scanner according to claim 1, wherein the 20 control unit further records additional information showing contents of processings with respect to the original in the memory in the IC chip built in the original, by the radio communication unit, at the time of scanning the original in which the IC chip having a 25 radio communication function has been embedded.

3. The scanner according to claim 1, further comprising:

a network interface which carries out data communication with an external device, wherein
the network interface respectively transfers the image data obtained by optically scanning the surface
of the original by the optically reading unit and the electronic data read from the memory in the IC chip
embedded in the original by the radio communication unit to the external devices.

4. A printer comprising:

an image forming unit which prints an image on a surface of an image forming medium;
a radio communication unit which, at the time of printing an image on the image forming medium in which an IC chip having a radio communication function is embedded, by the image forming unit, carries out radio communication with the IC chip; and
a control unit which, when image data to be printed on the image forming medium in which the IC chip having a radio communication function has been embedded is inputted thereto, prints an image based on the image data on the image forming medium by the image forming unit, and records the image data as electric data, by the radio communication unit, in a memory in the IC chip embedded in the image forming medium.

5. The printer according to claim 4, wherein, at the time of carrying out printing on the image forming medium by the image forming unit, the control unit

further records additional information showing contents of processings with respect to the image forming medium by the radio communication unit, in the memory in the IC chip embedded in the image forming medium.

5 6. The printer according to claim 4, further comprising

a network interface which carries out data communication with an external device, wherein
when a request for printing is received by the
10 network interface, the control unit carries out printing of an image on the surface of the image forming medium by the printer on the basis of print data received from the external device by the network interface, and records electronic data for being
15 wirelessly written received from the external device by the network interface, in the memory in the IC chip embedded in the image forming medium by the radio communication unit.

7. A copying machine comprising:

20 an optical reading unit which optically scans a surface of an original, and converts an image on the surface of the original into image data;

an image forming unit which prints an image on a surface of an image forming medium;

25 a radio communication unit which carries out radio communication with an IC chip embedded in the original or the image forming medium and having a radio

communication function; and

a control unit which carries out scanning of the original by the optical reading unit or printing on the image forming medium by the image forming unit, and
5 carries out reading or writing of electronic data by the radio communication unit with respect to a memory in the IC chip embedded in the original or the image forming medium.

8. The copying machine according to claim 7,
10 wherein

the radio communication unit carries out radio communication with the IC chip at the time of scanning the original in which the IC chip having a radio communication function has been embedded by the optical 15 reading unit, and

the control unit optically scans the surface of the original by the optical reading unit and converts the image on the surface of the original into image data, and reads the electric data recorded in the memory in the IC chip built in the original by the radio communication unit, and prints the image on the surface of the image forming medium on the basis of the image data of the original which the optical reading unit acquired by the image forming unit, or the 20 electric data read from the memory in the IC chip by the radio communication unit,
25

9. The copying machine according to claim 7,

wherein

the radio communication unit carries out radio communication with the IC chip at the time of printing of the image on the surface of the image forming medium
5 in which the IC chip having a radio communication function has been embedded, by the image forming unit, and

the control unit optically scans the surface of the original by the optical reading unit, converts the 10 image on the surface of the original into image data, and prints an image based on the image data on the surface of the image forming medium by the image forming unit, and records the image data as electronic data in the memory in the IC chip embedded in the image 15 forming medium by the radio communication unit.

10. The copying machine according to claim 7,

wherein

the radio communication unit comprises a first radio communication unit which carries out radio communication with the IC chip at the time of scanning, by the optical reading unit, of the original in which the IC chip having a radio communication function has been embedded, and a second radio communication unit which carries out radio communication with the IC chip at the time of printing, by the image forming unit, of 25 an image on the image forming medium in which the IC chip having a radio communication function has been

embedded, and

the control unit optically scans the surface of
the original by the optical reading unit and converts
the image on the surface of the original into image
5 data, and reads the electric data recorded in the
memory in the IC chip built in the original, by the
first radio communication unit, and

prints an image on the surface of the image
forming medium by the image forming unit on the basis
10 of the image data of the original acquired by the
optical reading unit, or the electric data read from
the memory in the IC chip of the original by the first
radio communication unit, and records the image data of
the original acquired by the optical reading unit, or
15 the electric data read from the memory in the IC chip
by the first radio communication unit, by the second
radio communication unit, in the memory in the IC chip
embedded in the image forming medium.

11. The copying machine according to claim 10,
20 further comprising

a control panel to which an instruction from a
user is inputted, wherein

the control unit selects whether data to be
printed on the image forming medium as an image by the
image forming unit is made to be the image data of the
25 original acquired by the optical reading unit, or to be
the electronic data read from the memory in the IC chip

of the original by the first radio communication unit, in accordance with the instruction of the user with respect to the control panel.

12. The copying machine according to claim 10
5 further comprising

a control panel to which an instruction from the user is inputted, wherein

the control unit selects whether data to be recorded by the second radio communication unit in the 10 memory in the IC chip embedded in the image forming medium is made to be the image data of the original which the optical reading unit acquired, or to be the electronic data read from the memory in the IC chip of the original by the first radio communication unit, in 15 accordance with the instruction of the user to the control panel.